ABSTRACT OF THE DISCLOSURE

A method and an apparatus for performing fault detection using real-time or near real-time data from a database. A first process on at least one semiconductor wafer is performed. Data is acquired on at least one of a real-time basis and a near real-time basis, the data comprising at least one of a process state data, a tool state data, and an integrated metrology data resulting from the first processing of semiconductor wafer. The data is stored in a database. A fault detection analysis is performed based upon the data acquired from the database based upon a trigger signal that causes data to be extracted from the database on a substantially real time basis.